

Abstract

Title: Evaluation of Plasma Calcium in Patients with Recurrent Aphthous Stomatitis

Introduction : Recurrent aphthous stomatitis (RAS) is one of the most common oral diseases. RAS characterized by recurring ulcers in the oral mucosa without any sign of other diseases. Aphthous ulcers are painful and shallow, usually covered with a grayish white pseudo-membrane that is surrounded by an erythematous margin. Many factors are involving in the etiology of RAS, systemic diseases, immunologic disorders, genetics, allergy, nutrition, and microbial. With respect to the role of calcium in wound healing procedures and regulating immune system, serum calcium levels can be considered as one of the factors causing the RAS. This study was aimed to investigate the serum total and ionized calcium of patients with RAS.

Method and Materials: In this case- control study, 32 patients with oral Recurrent Aphthous Stomatitis and 32 controls were selected randomly and their total and ionized serum calcium were investigated by Special kit and ISE method respectively. Descriptive statistics as well as Chi-squared test, were applied to analyze the data using SPSS19 software.

Results: The mean total and ionized serum calcium in the patient group were 9.77mg/dl and 5.6mmol/L while for control group were 9.75mg/dl and 4.48 mmol/L respectively. The serum level of ionized serum calcium showed statistically significant differences between the control and subject groups.

Conclusion: It was found that the ionized serum calcium in the patients with oral Recurrent Aphthous Stomatitis is significantly higher than the control group.

Keywords: Recurrent Aphthous Stomatitis; Ionized Calcium; Total Calcium; Serum Calcium